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**CENTRAL FAX CENTER****MAY 20 2008**Appl. No. **10/665,999**  
Amdt dated May 20, 2008**REMARKS/ARGUMENTS****Specification Amendments**

The specification is amended by adding a new sentence at page 154 at line 39. This new sentence is supported by the original specification at page 154 lines 35-38 which illustrate an example; more specifically page 154 line 37 discloses a complex value of "1.5 - 1.5i." The complex value is being "displayed" as described throughout the original specification, including, for example, item 135 in FIG. 1C discloses an act of "display" generally. More specifically, pages 154-157 disclose ">>" which denotes a prompt by the computer to enter a command, as indicated at lines 21-27 on page 153

The specification is further amended by adding a new sentence at page 156 between lines 13 and 14. This new sentence is supported by the original specification at page 156 lines 8-13, which illustrate another example. In this example, the value of "c" is subtracted from the value of "a" as per a command to perform a subtraction operation shown at line 8 of page 156. In this example, the subtraction operation results in a warning. The warning and the result of evaluation of subtraction are both "displayed" at lines 9-12 on page 156. More specifically, as noted above, the original specification indicates this is a display, at for example, page 153 at lines 21-22.

The specification is also amended by adding a new sentence at page 159 line 35. This new sentence is by the original specification at page 159 lines 29-34, which illustrate yet another example. In this example, line 32 at page 159 discloses the display of a scaling factor, namely "scaled by 2^0". This line also displays the words "signed" and "fxp" both of which are properties. Moreover, in this example, the user's command at line 30 on page 159 supplies four fixed point values (e.g. 3.14) and these are converted from fixed point to floating point, and the result of conversion is displayed at line 34 on page 159. Therefore, this example illustrates displaying a scaling factor and a property of a result of evaluation of an operation (conversion from fixed point to floating point).

Amendments to the specification, of the type described above, were verbally discussed in an Examiner Interview which was conducted on May 7, 2008. Participating in the Examiner Interview were Examiner Ngo, Inventor John R. Allen, and the

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undersigned, namely Omkar Suryadevara. During the interview, the undersigned described support for the specification amendments as noted in the prior page of this Remarks section of the current Amendment. At the end of the interview, the Examiner indicated that these amendments to the specification will be favorably considered.

#### Claim Amendments

In the Office Action dated January 28, 2008 the Examiner indicated that Claims 44-47 and 49-51 stand rejected under 35 USC 101, for being directed to non-statutory subject matter. Note that there was no prior art rejection of these claims.

Claim 44 has been amended to state that the memory is a computer readable memory. For support, see memory 470 in FIGs. 4C and 4D and the related description at page 51 lines 14-19 which state in pertinent part "In some embodiments, certain advantages are obtained by storing the scaling factor 485 in the fixed-point representation 480 in memory 470 of a computer, as shown in FIG. 4D." Hence, the specification supports claiming a memory that is computer readable.

Claim 44 is also amended in the "wherein" clause to state that the instructions cause a computer to operate floating point hardware. Support for this amendment is found throughout the original specification, including, for example, page 34 at lines 6-32, which are reproduced below for convenience:

Certain embodiments of the just-described computer 120 use hardware (not shown) that is dedicated for performance of floating-point operations. Examples of such hardware are found in Intel Corporation's microprocessor called Pentium Pro, which has two floating point units (and two integer units which are not used in some embodiments). Moreover, Intel's Pentium processor and the Intel486 processor both have one floating point unit. Note that such floating-point hardware may also be included in a computer as a math co-processor that is coupled to and used by a microprocessor. In several embodiments, the floating-point hardware conforms to an industry standard,

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such as IEEE Std. 854 and/or 754. For a description of such floating-point hardware, see Chapter 31 entitled "Floating Point Unit" in the book Intel Architecture Software Developer's Manual.

Such floating-point hardware is used as described herein, to emulate performance of fixed-point operations. For this reason, such a computer 120 (FIG. 1A), when programmed as described herein, may be used to simulate a Digital Signal Processor (DSP) that typically contains hardware dedicated for performance of fixed-point operations. Depending on the embodiment, such a computer 120 may emulate any commonly-used operations on one or more fixed-point operands e.g. a Boolean operation, a logarithmic or exponential operation in addition to one or more arithmetic and/or trigonometric operations.

Claim 44 is further amended to state that the display helps in debugging at least a portion of a program without use of a fixed point processor. Support for this amendment to Claim 44 can also be found throughout the application, including, for example, lines 24-34 on page 35 which are also reproduced below for convenience.

Note that, during emulation of a fixed-point operation, the reduction act is performed after the expansion act in all embodiments of the invention (as illustrated by expansion acts 125 and 325 in FIGs 1B and 3B preceding reduction acts 128 and 328, respectively), with the following advantage. This particular order allows the use of floating-point arithmetic (and therefore floating-point hardware) during emulation of fixed-point arithmetic, thereby to allow programs written in fixed-point arithmetic to be developed and debugged without use of fixed-point hardware.

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Therefore, allowance of Claim 44 is respectfully requested. Claims 45-47 and 49-51 depend from Claim 44 either directly or indirectly and are therefore also believed to be in form for allowance.

During the above-described interview, the undersigned discussed the reasons for §101 rejection of Claim 44. The Examiner indicated that the rejection was based on MPEP 2106. The undersigned asked if the above amendments to Claim 44 overcome §101. At the end of the interview, the Examiner indicated that these amendments to Claim 44 will be favorably considered. Note that no prior art reference was discussed.

New Claims 84-89 are added herewith, to depend from Claim 44. These claims are believed to be allowable for at least the same reason(s) as Claim 44. Support for the new Claims 84-89 can be found throughout the original specification, including the above-cited text supporting the amendments to the specification, e.g. pages 153-159. New Claims 90-95 are believed to be similarly supported, and allowable due to their dependence on Claim 12.

During the above-described interview, the undersigned asked if Claims 84-95 would be allowed. At the end of the interview, the Examiner also indicated that all these new claims will be favorably considered.

Therefore, Applicant respectfully requests allowance of all pending claims. If any changes are necessary to obtain a Notice of Allowance, such changes are hereby requested to be made by an Examiner Amendment.

To obtain approval for such an amendment, please call the undersigned at (408) 378-7777, extension 113.

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office to the fax number 571-273-8300 on May 20, 2008.

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*May 20, 2008*  
Date of Signature

Respectfully submitted,

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